

REMARKS

The Office Action dated April 7, 2003, has been received and carefully noted. The amendments made herein and the following remarks are submitted as a full and complete response thereto.

By this Amendment, claims 1-8, 10-17, and 19-23 have been amended, and claims 9 and 18 have been canceled without prejudice or disclaimer for filing in a continuation application. No new matter has been added by the amendments. Accordingly, claims 1-8, 10-17, and 19-23 are pending in this application.

Claim 9 was objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim, and clarification was required regarding this claim. Claims 1-9 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter the Applicant regards as the invention. The Applicant notes that claim 9 has been canceled without prejudice or disclaimer. Claims 1-8 have been amended, as appropriate, responsive to the objection and to the rejection under section 112. If any additional amendment is necessary to overcome the objection or this rejection, the Examiner is requested to contact the Applicant's undersigned representative.

Claims 1-6, 8-15, and 17-23 were rejected under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 6,323,673 to Starr, and claims 7 and 16 were rejected as being unpatentable under 35 U.S.C. §103(a) over Starr. The Applicant notes that claims 9 and 18 have been canceled without prejudice or disclaimer. To the extent that

these rejections remain applicable to the claims currently pending, as amended, the Applicant hereby traverses these rejections, as follows.

Circuit claim 1, as amended, includes a first termination resistor block that has a first transistor and a second transistor, and a second termination resistor block that has the second transistor and a third transistor. Further, the first transistor is a diode-connected transistor, and each of the second and third transistors is not a diode-connected transistor, the second transistor being commonly used by the first termination resistor block and the second termination resistor block. Among other things, the present invention, as claimed in claim 1, thus allows a circuit scale to be decreased and switching speed to be improved by reducing switching capacitance.

The Applicant respectfully submits that none of the cited prior art discloses or suggests at least these features, as claimed in claim 1, as amended. In Starr, for example, transistors (Fig. 3E) of a pull-up element and transistors (Fig. 3B) of a pull-down element are independently provided, and no transistor is shown as commonly used as both pull-up and pull-down elements.

For at least these reasons, the Applicant submits that claim 1, as amended, is allowable over the cited prior art. As claim 1 is allowable, the Applicant submits that claim 2, as amended, which depends from claim 1, is likewise allowable.

For similar reasons as discussed with regard to claim 1, the Applicant submits that system claims 10, 19, and 23, as amended, are allowable over the cited prior art. As claims 10 and 19 are allowable, the Applicant submits that claim 11, as amended,

which depends from claim 10, and claim 20, as amended, which depends from claim 19, are each likewise allowable.

Circuit claim 3, as amended, includes a first termination resistor block that has a first transistor and a second transistor, and a second termination resistor block that has the second transistor and a third transistor, the second transistor being commonly used by the first termination resistor block and the second termination resistor block. Further, a reference voltage or a voltage of a transmission line is applied to a gate of the first transistor, and the reference voltage and the voltage of the transmission line are not applied to a gate of each of the second and third transistors.

The Applicant respectfully submits that none of the cited prior art discloses or suggests at least these features, as claimed in claim 3, as amended, and that claim 3 is therefore allowable over the cited prior art. As claim 3 is allowable, the Applicant submits that claims 4 and 6-8, as amended, each of which depends from claim 3, are likewise allowable.

For similar reasons as discussed with regard to claim 3, the Applicant submits that system claims 12 and 21, as amended, are allowable over the cited prior art. As claims 12 and 21 are allowable, the Applicant submits that claims 13 and 15-17, as amended, each of which depends from claim 12, and claim 22, as amended, which depends from claim 21, are likewise allowable.

Circuit claim 5, as amended, includes a first termination resistor block that has a first transistor and a second transistor, and a second termination resistor block that has the second transistor and a third transistor, the second transistor being commonly used

by the first termination resistor block and the second termination resistor block. Further, a gate of the first transistor is connected to its drain, and a gate of each of the second and third transistors is not connected to its drain.

The Applicant respectfully submits that none of the cited prior art discloses or suggests at least these features, as claimed in claim 5, as amended, and that claim 5 is therefore allowable over the cited prior art.

For similar reasons as discussed with regard to claim 5, the Applicant submits that system claim 14, as amended, is allowable over the cited prior art.

With regard to the rejection under §103 in the Office Action, to the extent that it continues to be applicable to the claims, as amended, it is respectfully submitted that the Examiner has not yet set forth a *prima facie* case of obviousness. The PTO has the burden under §103 to establish a *prima facie* case of obviousness. In re Fine, 5 U.S.P.Q.2nd 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without

motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002).

In the Office Action, the Examiner states that it would have been obvious to combine the reference with routine experimentation the Examiner asserts to be within the level of one skilled in the art, so as to accomplish advantages the Examiner indicates. The Examiner provides no indication that the indicated motivation to make such combination is included within the cited reference or is within what is known in the art. See, e.g., Office Action at page 7. As such, this is an insufficient showing of motivation. In addition, the Applicant submits that the Examiner's citation of the MPEP section pertaining to the obviousness of ranges, where such ranges overlap ranges disclosed in the prior art, is inappropriate with respect to the claims for which the section 103 rejection has been made.

Should the Examiner feel that further action is required to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not being timely filed, the Applicant respectfully petitions for an appropriate extension time period. Any fees for such an extension of time,

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Docket No.: 100021-00062


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together with any additional fees, may be charged to counsel's Deposit Account No. 01-2300 making reference to Attorney Docket No. 100021-00062.

Respectfully submitted,

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7/7/03
Date


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